



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,104	09/07/2001	Qiang Cao	CAO 14-2-2	9351
7590 08/09/2005			EXAMINER	
Docket Administrator Rm 3C 512			FLANAGAN, KRISTA M	
Lucent Technologies Inc			ART UNIT	
600 Mountain Avenue			2817	
PO Box 636			PAPER NUMBER	
Murray Hill, NJ 07974-0636			DATE MAILED: 08/09/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

X

Office Action Summary	Application No. 09/936,104	Applicant(s) CAO ET AL.	
	Examiner Krista M. Flanagan	Art Unit 2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. In view of the amendment filed on 15 April 2005, the Examiner withdraws all objections to the drawings from the previous Office Action.

Specification

2. In view of the amendment filed on 15 April 2005, the Examiner withdraws all objections to the specification from the previous Office Action.

Response to Arguments

3. Applicant's arguments filed on 15 April 2005 have been fully considered but they are not persuasive.

The Applicant contends, "Amended claim 1 requires "wherein the selected node for a user must not coincide with a node reserved by another user only if the user and the other user are operational at the same time" (emphasis added). Amended claim 1 is novel to the standard of 35 USC 102(b) in that Gilhousen (WO 95/03652) does not disclose this feature. Amended claim 1 also meets the standard of 35 USC 103 over Gilhousen, in that this feature is nowhere there suggested. Specifically the passage of Gilhousen cited by the Examiner as being relevant is page 16 lines 26 to 28...[quote omitted by the Examiner – please see reference].

To paraphrase this passage, in the approach of Gilhousen, assignment of overlapping codes is not permitted, apparently at any time. Gilhousen, which is in line with the prior art approach to channelisation code allocation described in respect of Figure 2 of the present application, forbids the allocation of overlapping code branches. In the specific Figure 2 example, this is done by applying numbered rules 1 and 2 described on page 5 lines 22 to 29 of

the present application. On the other hand, the present invention allows the allocation of overlapping code branches to two users unless the two users are both operational at the same time (see e.g. page 14 lines 1 to 4 which states "It is also possible that any two users may in any event not be operating at the same time. Thus even if a clash exists between a selected node and a reserved node there may be no detriment to performance if the two users do not operate at the same time."")

The Examiner disagrees and asserts, that, Gilhousen does disclose a method of allocating channelization code in a CDMA system wherein the selected node for a user must not coincide with a node reserved by another user only if the user and the other user are operational at the same time. Page 16, lines 26 to 28, of Gilhousen apparently states that overlapping is not permitted when the code is assigned or in use. On page 17, lines 1-17 of Gilhousen we see the explanation of how a code is assigned when in use and added to the assigned list and then removed and put on the busy list when communication is concluded. The busy list holds codes, which can be simultaneously assigned. Also we see on page 15, lines 37-45 of Gilhousen that simultaneous node assignment is indeed allowed except for where the codes are simultaneously utilized. The code may not be assigned to other communications channels when the code is in use.

4. The Gilhousen patent was presented in the previous Office Action.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Gilhousen WO 95/03652 A.

7. Regarding claim 1, Gilhousen discloses a method of allocating a channelization code in a code division multiple access system comprising for each user: selecting a node of a path in a code tree in dependence on the currently required spreading factor (See page 14, lines 11-17 and page 13, lines 16-23 wherein the Walsh sequence is used in assigning varying lengths of orthogonal coding for user channels within a code tree starting from a particular node in the tree); and reserving all nodes on the code tree in an upward and downward direction from the selected node (See page 14, lines 22-25); wherein the selected node for any user must not coincide with a node reserved by any other user (See page 15, lines 38-40), characterized in that the path in the code tree is defined based on a required range of spreading factors (See page 13, lines 16-23 and page 14, lines 11-17 wherein the Walsh sequence is used in assigning varying lengths of orthogonal coding for user channels within a code tree), and wherein for each user the defined path is communicated to that user in the downlink during radio access bearer (RAB) establishment (See page 19, lines 26-29) and wherein the selected node for a user must not coincide with a node reserved by another user only if the user and the other user are operational at the same time (See page 15, lines 37-45; page 16, lines 26-32; and page 17, lines 1-17).

8. Regarding claim 2, which inherits all of the limitations of claim 1, Gilhousen discloses a method of allocating a channelization code in a code division multiple access system wherein if a selected node does coincide with a node reserved by another user, a new path is defined for the user (See page 16, lines 26-28).

9. Regarding claim 4, which inherits all of the limitations of claim 1, Gilhousen discloses a method of allocating a channelization code in a code division multiple access system further comprising the step of defining at least two paths in the code tree for any user (See page 16, lines 21-32 and page 17, lines 1-17 where a list of potential codes are identified).

10. Regarding claim 5, which inherits all of the limitations of claim 1, Gilhousen discloses a method of allocating a channelization code in a code division multiple access system, wherein the step of defining a path in the code tree comprises defining an origin node for each user; and defining a path from the origin node based on the required range of spreading factors (See page 17, lines 1-17 where the list of assignable codes is checked based on the chip length appropriate for the data rate of the requesting channel).

11. Regarding claim 6, which inherits all of the limitations of claim 1, Gilhousen discloses a method of allocating a channelization code in a code division multiple access system, wherein the selected node for each user is communicated to the user in data packets (See page 19, lines 26-29).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista M. Flanagan whose telephone number is (571) 272-2203. The examiner can normally be reached on Monday - Friday, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2631

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Flanagan
20050725

M. G. -
MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER